Docket JP920020187US1   Appl. No.: 10/720,894
                                                                   Filed: 11/24/2003

REMARKS

Posture of Case

Claims 1-14 were originally filed on November 24, 2003. A first, nonfinal Office action

of April 3, 2007, rejected claims 6 and 10 stand rejected under 35 U.S.C. 112, second paragraph,

as being indefinite for failing to particularly point out and distinctly claim the subject matter

which applicant regards as the invention. In Reply A, filed August 2, 2007, Applicant

responsively amended claims 6 and 10 to overcome the rejection. The first Office action also

rejected claims 1-14 under 35 U.S.C. 101 on grounds that the claimed invention is directed to

non-statutory subject matter. Applicant responsively amended claims to overcome the rejection.

Claims 1-5, 6, 9, 10-14 were rejected in the first Office action under 35 U.S.C 102 (b) as being

anticipated by Patent no. US 6330583 (**Reiffin**). Claims 7 and 8 were rejected under 35 U.S.C.

103(a) as being unpatentable over **Reiffin** in view of Patent no.US6915212 (**Kamps**). Applicant

traversed the rejections.

The present, final Office action of October 17, 2007 rejects all claims. Claims 1-14 are

rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description

requirement. Claims 1-6 and 9-14 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Reiffin in view of applicant admitted prior art, and also as being unpatentable over Reiffin

in view of US 2003/0154177 (Holland). Claims 7 and 8 are rejected under 35 U.S.C. 103(a) as

being unpatentable over Reiffin in view of Holland and further in view of Kamps.

Action herein

Applicant herein requests that claims 11-14 be canceled from further consideration in this

application. Applicant is not conceding that the subject matter encompassed by claims 11-14 is

unpatentable. Claims 11-14 are herein canceled solely to facilitate expeditious prosecution of

the remaining claims. Applicant respectfully reserves the right to pursue additional claims,

including the subject matter encompassed by claims 11-14, as presented prior to this reply

accompanying Request for Reconsideration in one or more continuing applications.

Applicant herein traverses the above rejections of remaining claims 1-10, presenting

arguments herein below that claims are allowable. Applicant also herein submits new claims

15-23 along with arguments herein below that the new claims are allowable.

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Applicant's Response to Examiner's Prior Arguments

Regarding the present Office action, on pages 13 and 14, items 14 and 15, in response to Applicant's query about what measure of task complexity **Reiffin** teaches, the Office action indicates that the claimed "complexity measures" can be read as "compute-intensive" task. That is, the Office action appears to equate a complexity measure with a compute-intensive task. Applicant respectfully submits that a complexity measure is not like a compute-intensive task. More generally, a measure is not a task. Measuring may be a task. Measuring complexity may be a task. But in what way is a "complexity measure" a task?

A task is an action that is performed. It makes sense to say, "The computer measures complexity of a task." It makes sense to say, "The computer determines a complexity measure of a task." It makes sense to say, "The computer does a task." How does it make sense to say, "The computer does a complexity measure."?

To be even more clear, note that claim 1 explicitly states (in the next to last step) that complexity measures are determined "based upon complexity measures of actions." Thus, it should be entirely clear that a complexity measure is not *itself* an action and, likewise, not a task. The sentence construction of claim 1 makes clear that complexity is a *measure* of an action or task and that a complexity measure is a quality or property of an action or task. The complexity measure itself is not the action or task Moreover, the specification confirms this. See, e.g., at least present application, as published, paragraphs 0089 and 0090.

In an effort to understand the assertions of the Office action, it has occurred to Applicant that it would make grammatical sense to formulate a statement such as, "a task of determining a complexity measure may be a compute-intensive task, i.e., determining a complexity measure is compute-intensive." Perhaps this is what the Office action is asserting. However, Applicant finds no such teaching in the reference. Besides, there is no discussion in the present Office action to which this understanding might be applied.

In response to Applicant's query about what *measures* of task complexity **Reiffin** teaches that are "determined based upon complexity measures of actions specified by respective combinations of available recipes," as recited in claim 1, The Office action asserts at page 14, item 15, that "it" [presumably, a measure of task complexity] is "determined based on the fact that such compute-intensive task is partitioned into a plurality of smaller subtasks, which are then

distributed to other computers in the network to be executed simultaneously in parallel," citing **Reiffin**, col. 2, lines 19- 33.

Unfortunately, this does not clear up the matter for Applicant. How does the fact of partitioning a compute-intensive task "into a plurality of smaller subtasks, which are then distributed to other computers in the network to be executed simultaneously in parallel" determine a measure of complexity? More particularly, how does this fact determine a measure of complexity "based upon complexity measures of actions specified by respective combinations of available recipes," as claimed?

Regarding the present Office action, page 14 and 15, item 17, for the rejection of "determining predetermined complexity measures for basic actions that are not specified by a recipe," as recited in claim 3, the Office action attempts to clarify the previous Office action's application of teaching by **Reiffin** about determining whether a local task needs to be executed during a next clock tick. In doing so, the present Office action points out that it is equating a "predetermined complexity measure" with a "local task." Regretfully, this also does not clear up the matter for Applicant.

Once again, in what way is a "complexity measure" a task? Or in what way would finding a teaching that "determining a complexity measure may be a compute-intensive task or a local task" (if there was such a teaching) clarify the application of teaching about determining whether a local task needs to be executed during a next clock tick to the matter of "determining predetermined complexity measures for basic actions that are not specified by a recipe," as recited in claim 3?

Regarding the present Office action, page 15, item 18, see discussion herein above regarding "task" and "complexity measure" with respect to pages 13 and 14, items 14 and 15, of the Office action,

Claim Rejections - 35 USC § 112

Claims 1-14 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement.

In order to overcome a rejection under 35 USC 101 presented by the first Office action, Applicant amended claim 1 In Reply A to recite " presenting a report of the complexity measures associated with performing the task." Reply A indicated that paragraphs 6 and 7 of the application, as published, provide support for the amendment.

Firstly, the present Office action states, on page 4, lines 17-19, that "In the same field of endeavor, the **Admission** discloses a method of generating and presenting a report of the complexity measures associated with performing the task (**Admission:** page 1, paragraphs 0006-0007)." Applicant agrees that page 1, paragraphs 0006-0007 of the present application teaches generating and presenting a report. Applicant disagrees, however, with the assertion that the Admission explicitly states determining the complexity measures associated with performing the task. However, elsewhere in the application there is explicit teaching that enables determining the complexity measures associated with performing the task.

On the other hand, if the above assertion by the Examiner in the present Office action is upheld, this statement alone is sufficient to overcome the rejection under 35 U.S.C. 112, first paragraph, since the Examiner contends that page 1, paragraphs 0006-0007 of the present application "discloses a method of generating and presenting a report of the complexity measures associated with performing the task."

Secondly, the present Office action points out that paragraphs 6 and 7 of the published application are directed toward preparing and presenting a report for subactions carried out by the software agents, and further points out that this teaching does not explicitly disclose complexity measures. On this basis, the Office action rejects the claim under 35 USC 112, first paragraph, as failing to comply with the written description requirement, i.e., as failing to describe the claimed matter in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s) at the time the application was filed, had possession of the claimed invention.

Applicant agrees that paragraphs 6 and 7 of the published application are directed toward preparing and presenting a report for subactions carried out by the software agents, and that this teaching, by itself, does not explicitly disclose complexity measures. Applicant regrets having

incompletely stated the basis of support in the application for the amended claim. This arose because Applicant believed the aspect of the amendment about complexity measures would be immediately apparent from the immediate context of the remarks in Reply A and the claim itself.

The following is intended to explain why Applicant believed the aspect of the amendment about complexity measures would be immediately apparent and is herein submitted in order to be more particularly explicit about support for the previous amendment to claim 1, which recites "presenting a report of the complexity measures associated with performing the task."

As the present Office action states, paragraphs 6 and 7 of the published application are directed toward preparing and presenting a report, where the report is for subactions carried out by the software agents. Applicant feels it is not controversial to submit that those of ordinary skill in the art understood at the time of the present invention that actions carried out by software agents (which may also be called "tasks) are, of course, tasks carried out by a computer system. That is, the computer system gives rise to the software agents in the course of executing the software for those software agents. Thus the computer uses the software agents to perform tasks. If this proposition is controversial, then suffice it to say that the present application provides support for the matter. See at least, e.g., present application, as published, paragraphs 0102 and 0103 (computer system operation gives rise to software agents, which perform tasks).

The preamble of claim 1 states that the claim is directed to steps performed "in a computer system for assessing the relative complexity of different options for performing a task by the computer system." Thus, from the context of the claim and the specification it is clear that "preparing and presenting a report for subactions carried out by the software agents" (which is how the Office action characterizes paragraphs 6 and 7 of the published application) provides support for "preparing and presenting a report by a computer system for actions carried out by the computer system."

Moreover, the claim states (in the step immediately preceding the step in question) that the method in the computer system includes the step of "determining complexity measures associated with performing [a] task." (Correctly, no issue has been raised about support for this step, since the present application clearly provides support for it.) Thus, it is clear that the computer system determines complexity measures. Since paragraphs 6 and 7 of the published application teach preparing and presenting a report by a computer system for actions carried out

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by the computer system; and since, as explained herein above, claim 1 and the detailed
description of the present specification both state that the computer system carries out the action
of determining complexity measures; therefore, it is clear that the application describes the
computer system "presenting a report of the complexity measures associated with performing the
task."

Claim Rejections - 35 USC § 103

**Claims 1-6 and 9-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over
Reiffin in view of applicant admitted prior art.**

Regarding claim 1, the present Office action asserts that Reiffin teaches "a method in a
computer system for assessing the relative complexity of different options for performing a task
by the computer system." Applicant notes that the above language recited in the Office action is
not stated by Reiffin. Applicant notes that Reiffin does not make the literal statement "assessing
the relative complexity of different options for performing a task by the computer system."
Indeed, Applicant is unable to find any use in Reiffin of the term "complexity." The Office
action points to Reiffin's use of the term "compute-intensive," possibly to assert that this term is
synonymous with the term "complexity." However, the Office action does not point to any
specific teaching by Reiffin about determining a measure of a task's compute-intensiveness.

The Office action observes that **Reiffin**, col. 2 lines 26-33, and col. 5, lines 3-8, teaches a
computer node or agent searches for an available subtask waiting in a queue, copies the subtask
program, so that the program may be executed concurrently with a local task in the foreground
and background. The Office action contends that this teaching meets the step "determining
complexity measures associated with performing the task using different combinations of recipes
for constituent actions of the task, based upon complexity measures of actions specified by
respective combinations of available recipes," as recited in claim 1. Applicant respectfully
disagrees. **Reiffin** makes no mention or suggestion of "complexity measure." **Reiffin** mentions
merely that a task is "compute-intensive." See arguments herein above under the subheading
"Applicant's Response to Examiner's Prior Arguments."

Regarding claim 2, the Office action observes that **Reiffin**, col. 2 lines 19-33, and col. 4,
line 64 to col. 5, line 8, teaches that a large compute-intensive task is partitioned into a plurality

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of smaller subtasks and stored. The Office action contends that this teaching meets the claim feature "complexity measures for actions are defined in terms of the complexity measures of available recipes for performing the actions, and complexity measures for recipes are defined in terms of the complexity of the subactions of the recipe," as recited in claim 2. Applicant respectfully disagrees. Again, because Reiffin has no teaching or suggestion of "complexity measure," Reiffin clearly does not teach or suggest a specific way of defining complexity measures for actions and complexity measures for recipes. All the more certainly, Reiffin does not teach or suggest the specific way recited in the claim, wherein complexity measures are "defined in terms of the complexity measures of available recipes for performing the actions, and complexity measures for recipes are defined in terms of the complexity of the subactions of the recipe."

Further, regarding claim 3, the Office action observes that Reiffin, col. 5, lines 23-39, teaches determination of whether a local task needs to be executed during the next clock tick. The Office action contends that this teaching meets the feature "determining predetermined complexity measures for basic actions that are not specified by a recipe," as recited in claim 3. See arguments herein above under the subheading "Applicant's Response to Examiner's Prior Arguments."

Regarding claim 3, the Office action also observes that Reiffin, col. 5, lines 55-62, teaches that the node (acting as an agent for the computer with the compute-intensive task) determines whether there is a network subtask that needs to be performed in the next timeslice. The Office action contends that this teaching anticipates "determining specified complexity measures for contracted actions that are performed by a different agent," as recited in claim 3. Again, there is no teaching or suggestion by Reiffin that the node determines a complexity measure.

Likewise, the Office actions cite teachings by Reiffin that do not teach or suggest what is recited in claims 4-6, since the claims recite aspects of the method that concern complexity measures but cited teachings of Reiffin do not teach or suggest a complexity measure.

Claims 1-6 and 9-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Reiffin in view of US 2003/0154177 (Holland).

Regarding claim 1, the present Office action asserts that Reiffin teaches "a method in a computer system for assessing the relative complexity of different options for performing a task by the computer system." Applicant notes that the above language recited in the Office action is not stated by Reiffin. Applicant notes that Reiffin does not make the literal statement "assessing the relative complexity of different options for performing a task by the computer system." Indeed, Applicant is unable to find any use in Reiffin of the term "complexity." The Office action points to Reiffin's use of the term "compute-intensive," possibly to assert that this term is synonymous with the term "complexity." However, the Office action does not point to any specific teaching by Reiffin about determining a measure of a task's compute-intensiveness.

The Office action observes that **Reiffin**, col. 2 lines 26-33, and col. 5, lines 3-8, teaches a computer node or agent searches for an available subtask waiting in a queue, copies the subtask program, so that the program may be executed concurrently with a local task in the foreground and background. The Office action contends that this teaching meets the step "determining complexity measures associated with performing the task using different combinations of recipes for constituent actions of the task, based upon complexity measures of actions specified by respective combinations of available recipes," as recited in claim 1. Applicant respectfully disagrees. **Reiffin** makes no mention or suggestion of "complexity measure." **Reiffin** mentions merely that a task is "compute-intensive." See arguments herein above under the subheading "Applicant's Response to Examiner's Prior Arguments."

Regarding claim 2, the Office action observes that **Reiffin**, col. 2 lines 19-33, and col. 4, line 64 to col. 5, line 8, teaches that a large compute-intensive task is partitioned into a plurality of smaller subtasks and stored. The Office action contends that this teaching meets the claim feature "complexity measures for actions are defined in terms of the complexity measures of available recipes for performing the actions, and complexity measures for recipes are defined in terms of the complexity of the subactions of the recipe," as recited in claim 2. Applicant respectfully disagrees. Again, because **Reiffin** has no teaching or suggestion of "complexity measure," **Reiffin** clearly does not teach or suggest a specific way of defining complexity measures for actions and complexity measures for recipes. All the more certainly, **Reiffin** does

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not teach or suggest the specific way recited in the claim, wherein complexity measures are "defined in terms of the complexity measures of available recipes for performing the actions, and complexity measures for recipes are defined in terms of the complexity of the subactions of the recipe."

Further, regarding claim 3, the Office action observes that **Reiffin**, col. 5, lines 23-39, teaches determination of whether a local task needs to be executed during the next clock tick. The Office action contends that this teaching meets the feature "determining predetermined complexity measures for basic actions that are not specified by a recipe," as recited in claim 3. See arguments herein above under the subheading "Applicant's Response to Examiner's Prior Arguments."

Regarding claim 3, the Office action also observes that **Reiffin**, col. 5, lines 55-62, teaches that the node (acting as an agent for the computer with the compute-intensive task) determines whether there is a network subtask that needs to be performed in the next timeslice. The Office action contends that this teaching anticipates "determining specified complexity measures for contracted actions that are performed by a different agent," as recited in claim 3. Again, there is no teaching or suggestion by **Reiffin** that the node determines a complexity measure.

Likewise, the Office actions cite teachings by **Reiffin** that do not teach or suggest what is recited in claims 4-6, since the claims recite aspects of the method that concern complexity measures but cited teachings of **Reiffin** do not teach or suggest a complexity measure.

Claim 9 is allowable at least because it depends on an allowable base claim.

With regard to claim 10, Reiffin does not teach that "each of the series of actions having a corresponding complexity," as claimed.

Claims 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Reiffin in view of Holland and further in view of Kamps.

Applicant submits that claims 7, 8, 21, and 22 are allowable at least because they depend on respectively allowable base claims.

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New claims 15-23

New claims 15-23 are herein added to more particularly point out an invention disclosed in the present application. No new matter is presented. See claims 1-10. Also, regarding the matter recited in claim 15, " the defined task includes a task for administering a networked computer system," see specification, as published, paragraph 0151.

Applicant submits that claim 15 is allowable for reasons set out herein above regarding claims 1 and 10. Applicant submits that claims 16-23 are allowable for reasons set out herein above regarding claims 2-9.
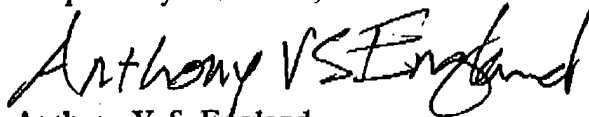
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REQUESTED ACTION

For the reasons explained herein above, Applicant contends that the previously submitted claims 1-10 and the newly submitted claims 15-23 are patentably distinct, and hereby requests that Examiner grant allowance and prompt passage of the application to issuance.

Respectfully submitted,

Anthony V. S. England
Attorney for IBM Corporation
Registration No. 35,129
512-477-7165
a@aengland.com

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